1248.675

FIG. 1

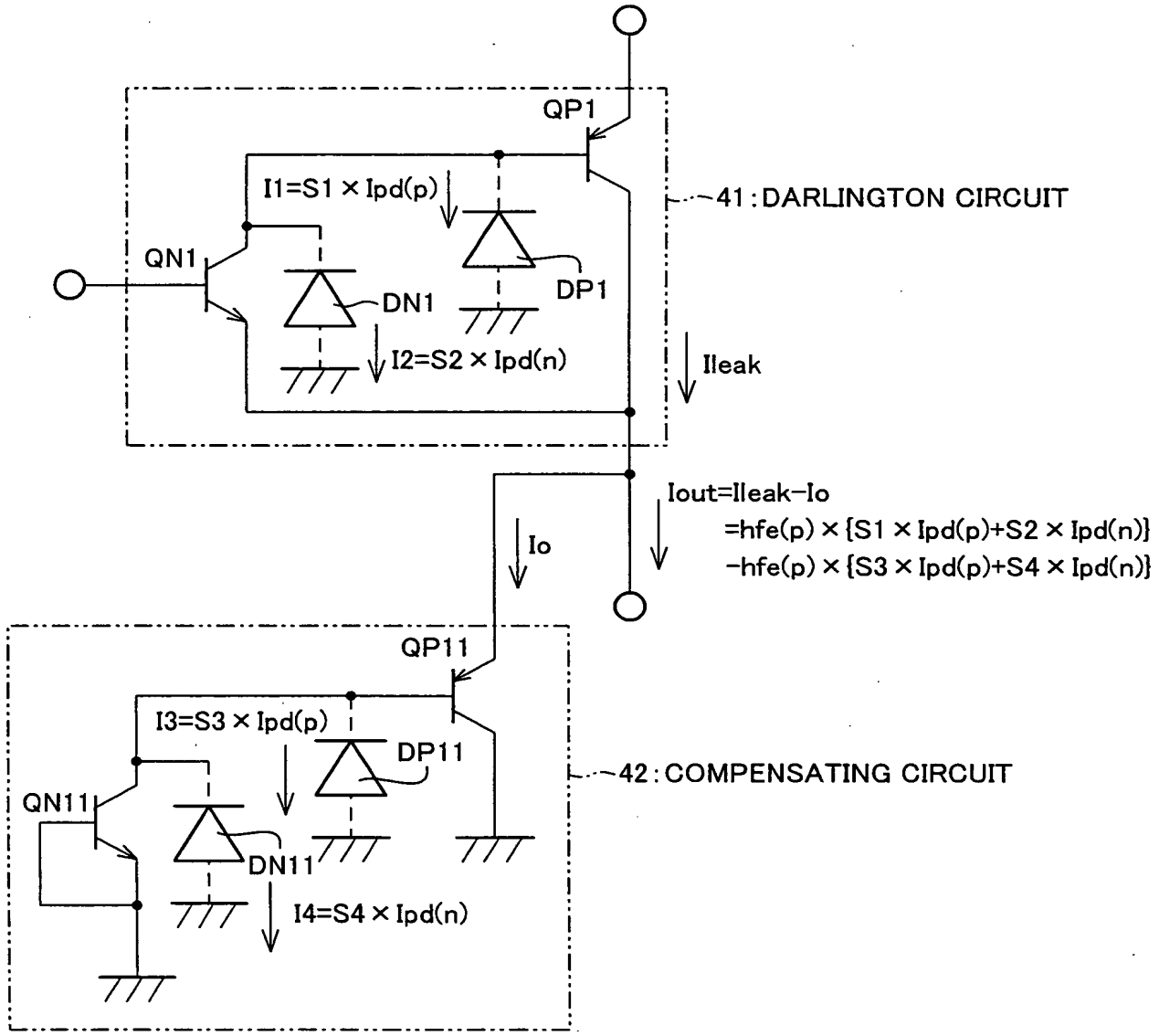

FIG. 2
RELATED ART

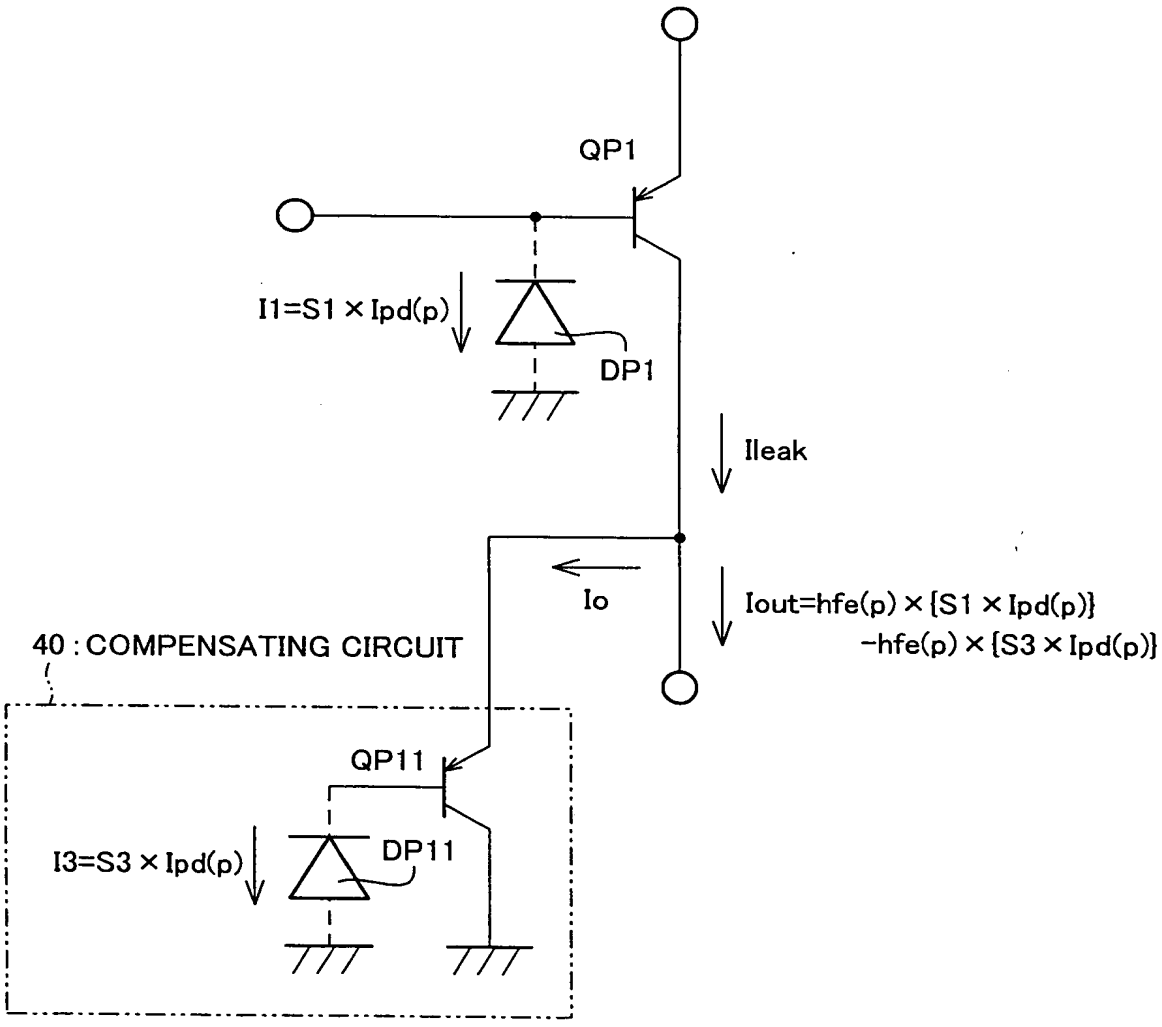

FIG. 3

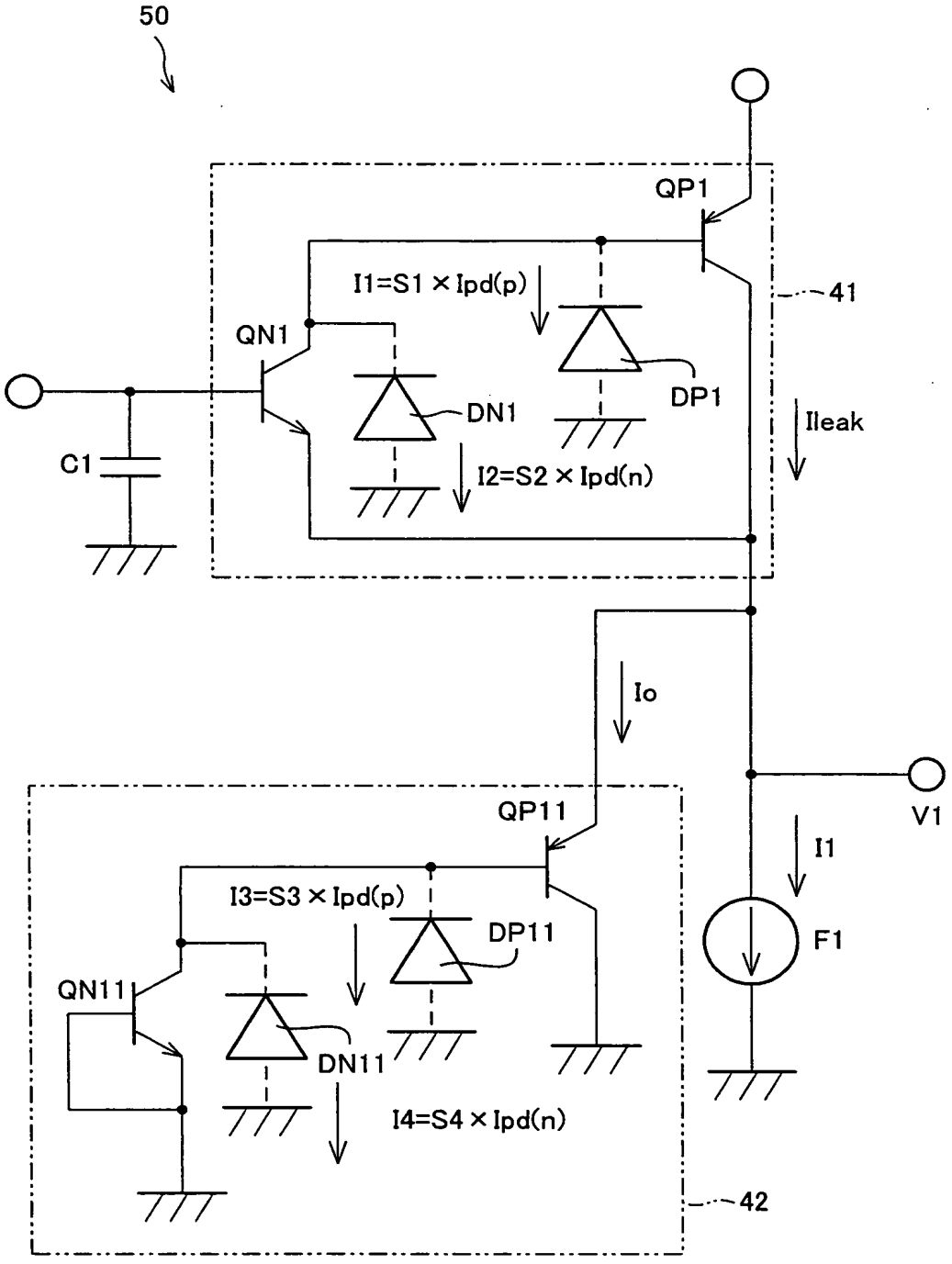
50
QP1
I1=S1 × Ipd(p)
41
QN1
DP1
DN1
Ileak
C1
I2=S2 × Ipd(n)
Io
V1
QP11
I1
I3=S3 × Ipd(p)
DP11
F1
QN11
DN11
I4=S4 × Ipd(n)
42

FIG. 4

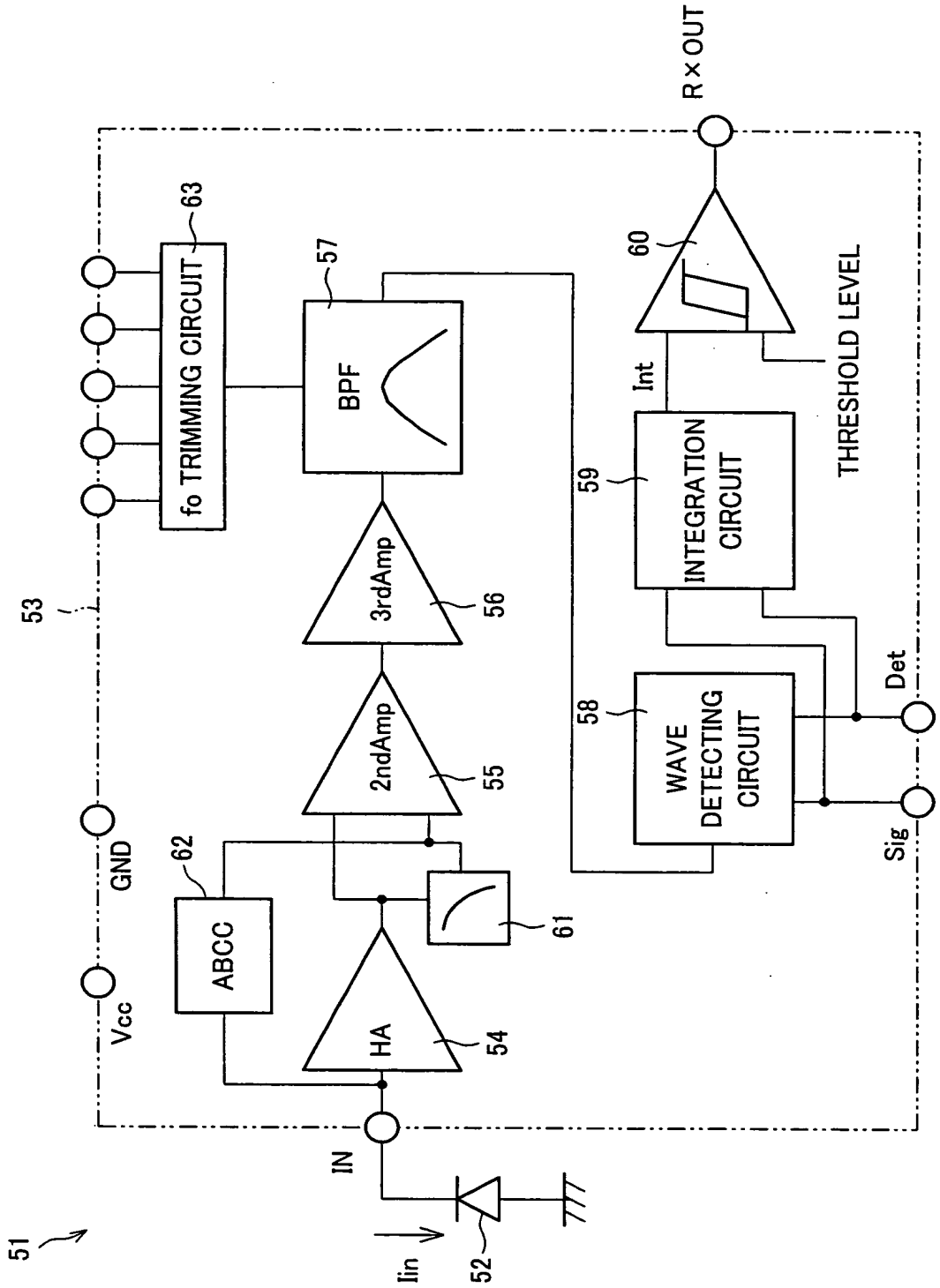
51
53
Vcc
GND
IN
Iin
52
HA
54
ABCC
62
2ndAmp
55
3rdAmp
56
BPF
57
fo TRIMMING CIRCUIT
63
61
WAVE DETECTING CIRCUIT
58
INTEGRATION CIRCUIT
59
Int
60
THRESHOLD LEVEL
R×OUT
Det
Sig

FIG. 5

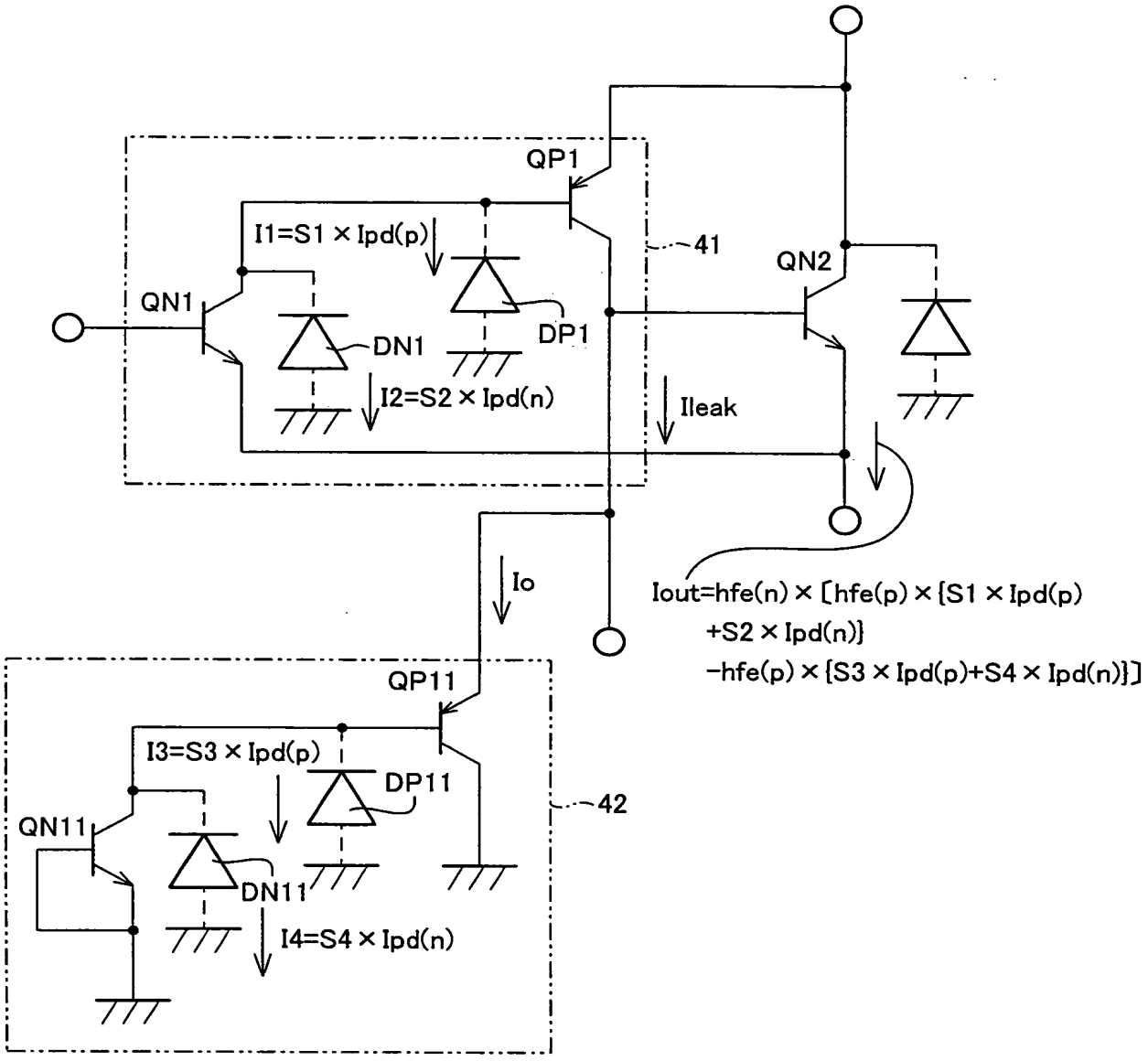
QP1
I1=S1 × Ipd(p)
41
QN2
QN1
DN1
DP1
I2=S2 × Ipd(n)
Ileak
Io
Iout=hfe(n) × [hfe(p) × [S1 × Ipd(p)
+S2 × Ipd(n)]
−hfe(p) × [S3 × Ipd(p)+S4 × Ipd(n)]]
QP11
I3=S3 × Ipd(p)
DP11
42
QN11
DN11
I4=S4 × Ipd(n)

FIG. 6
PRIOR ART

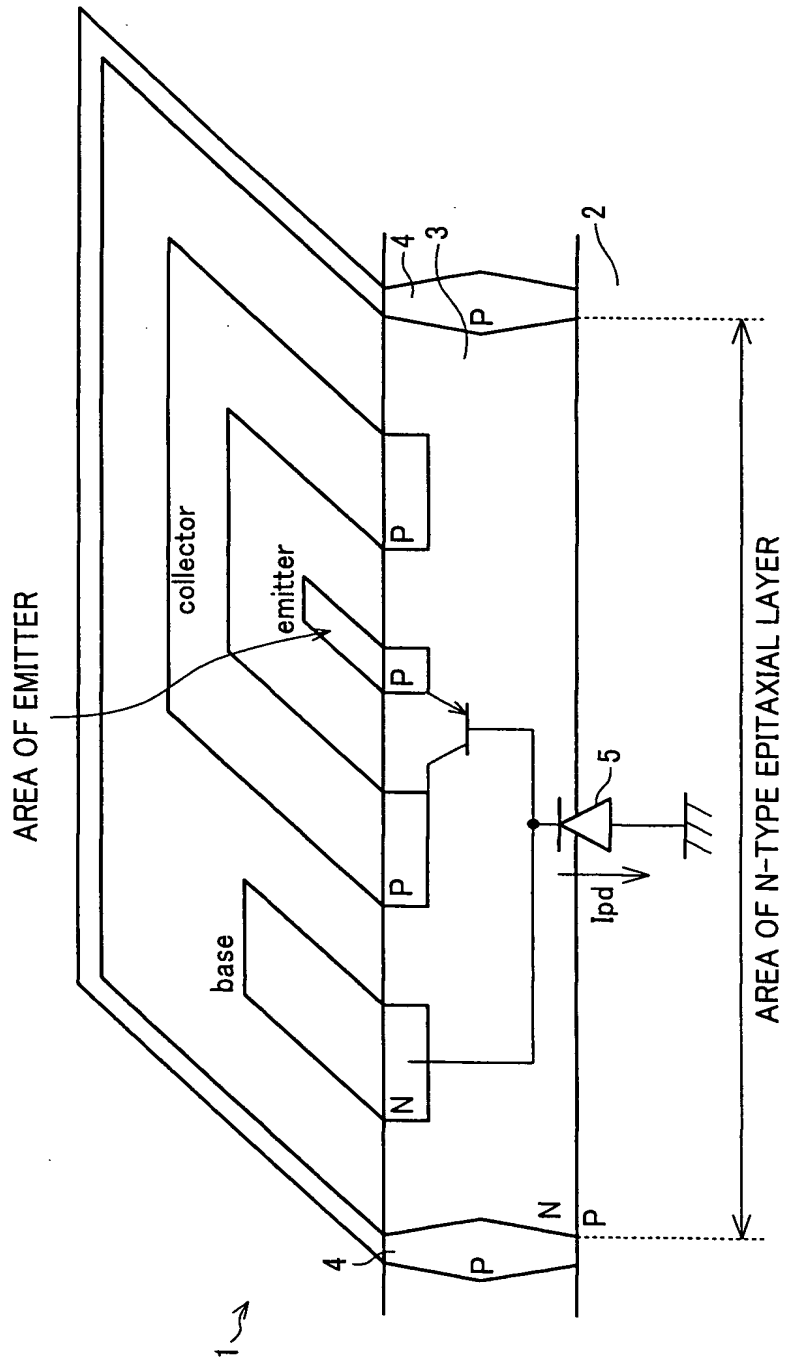

FIG. 7
PRIOR ART

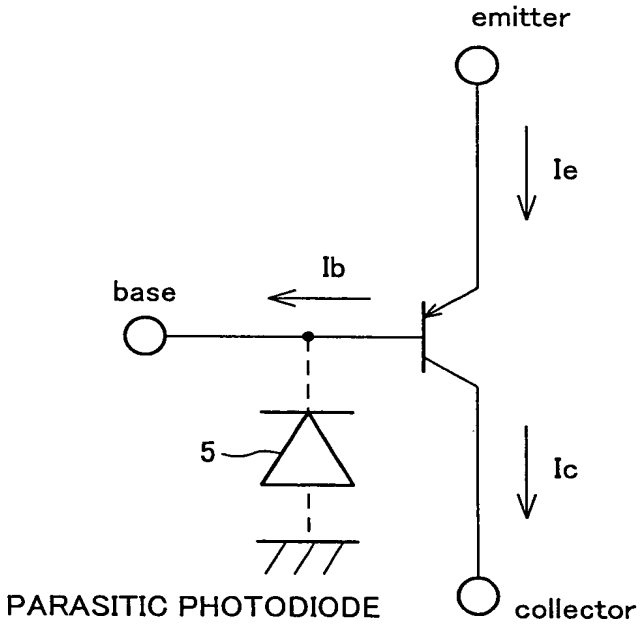

FIG. 8
PRIOR ART

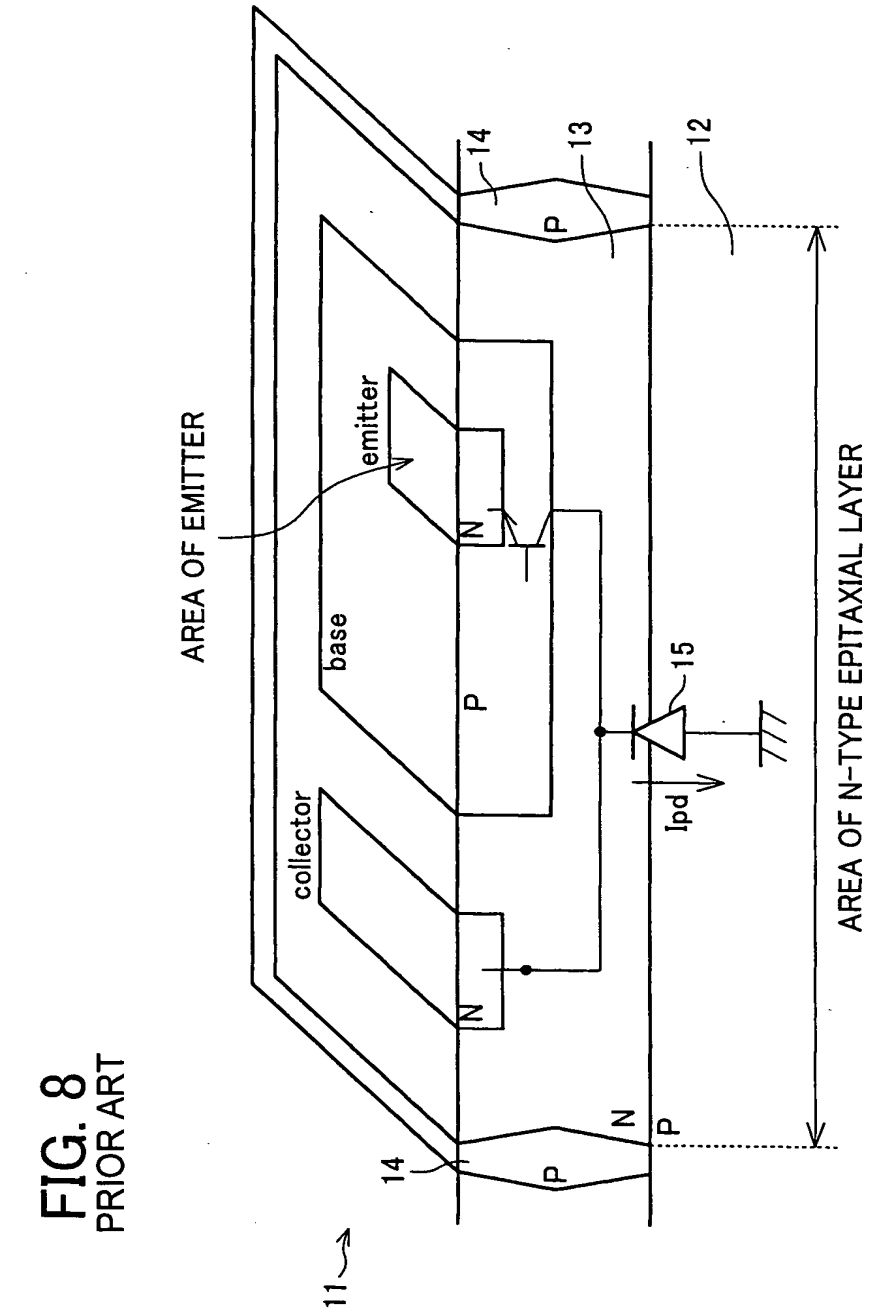

FIG. 9
PRIOR ART

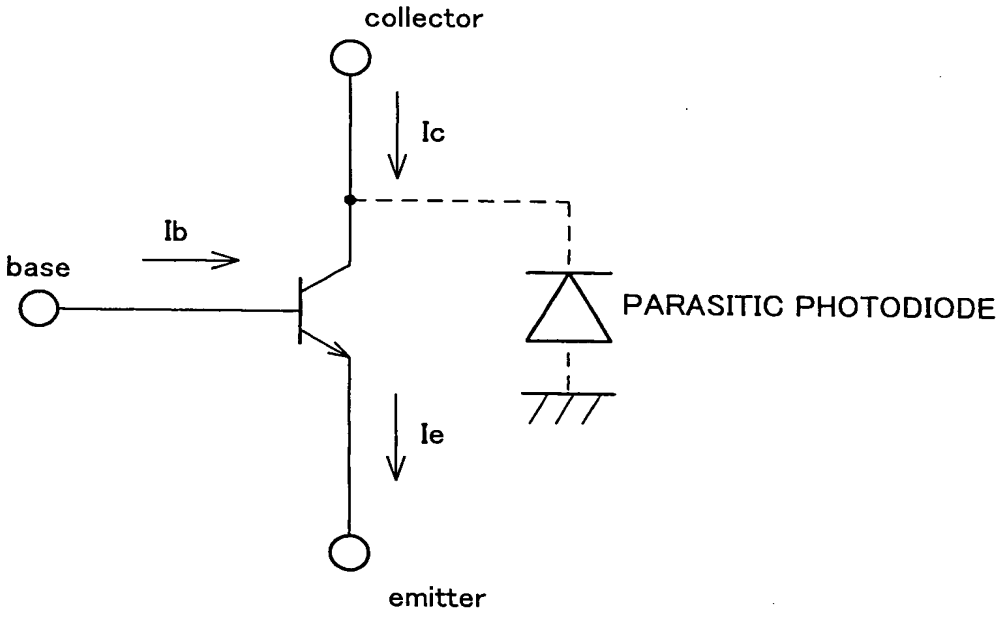

FIG. 10
PRIOR ART

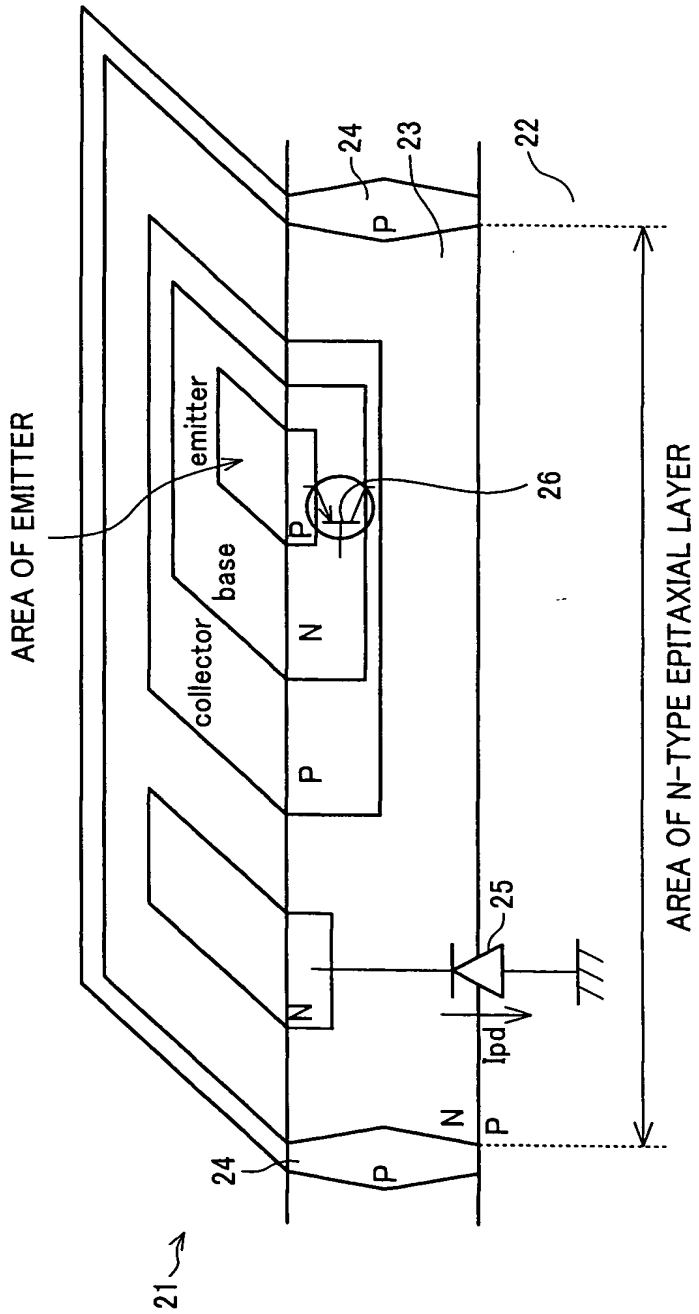

FIG. 11
PRIOR ART

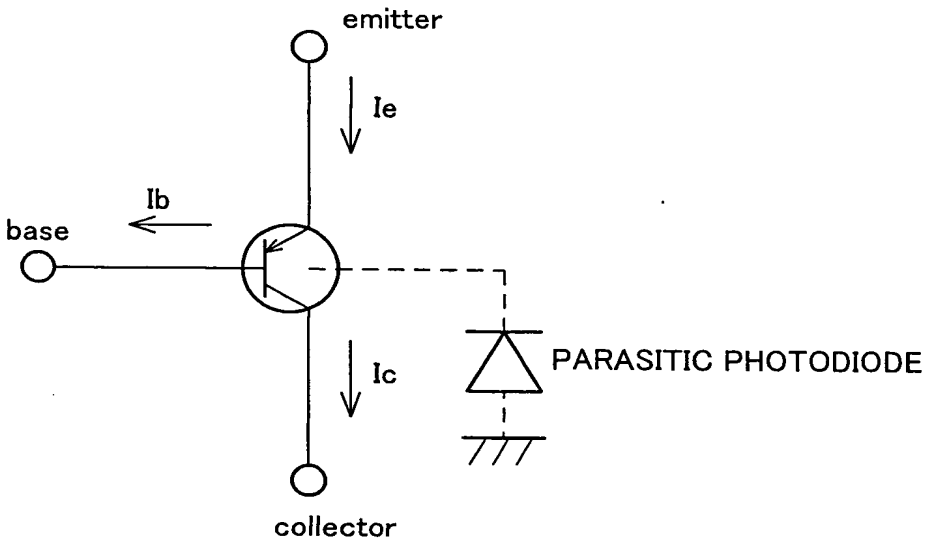

FIG. 12
PRIOR ART

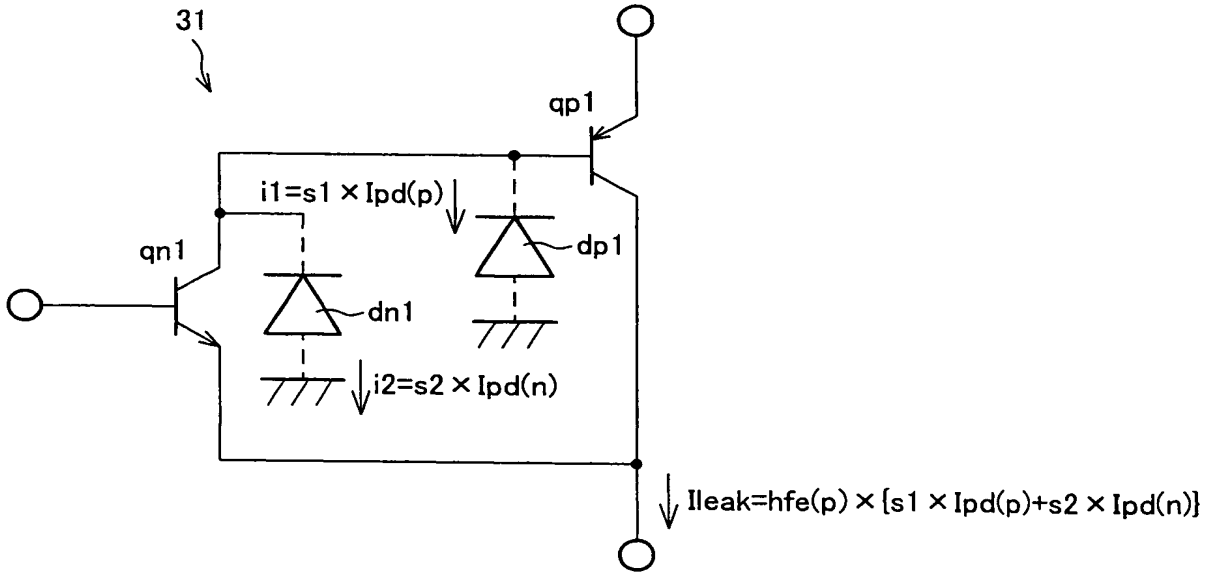

FIG. 13
PRIOR ART